

Residential Recycling

A New Era of Waste Management

MARK KELSEY, DIRECTOR
ERIN MILLER, ENVIRONMENTAL STEWARD
ANDREW RUMPKE, RUMPKE RECYCLING
STEVE SARGENT, RUMPKE RECYCLING



City of Columbus
Michael B. Coleman, Mayor

Why Are We Doing This?



Preserve the Environment

- Columbus is among the largest cities in the nation without comprehensive residential recycling
- Tried other programs
- “Columbus can do better”
- Green city
- Improve quality of life



Why Are We Doing This?



It's the Right Thing to Do

- Citizens want recycling as basic city service
- Consistent with national best practices
- Get serious about recycling, reselling and reusing waste products



Why Are We Doing This?



It's Affordable & Cost-effective

- The more Columbus recycles, the more it saves
- Program costs offset by \$13-\$15 million savings in tipping fees over 5 years
- One-third of 1% of city budget



Why Are We Doing This?



Easy & Convenient

- Recycling carts delivered to households
- Educational campaign to increase participation



Columbus is the Only City in our Region without Residential Recycling



- Thousands of cities in the United States recycle at curbside
- Survey results support recycling
- Public Service has commitment, resources and partners to make this a success for our residents and city



Recycling one ton of paper saves 17 trees

Presentation Outline



- Program Details
 - Erin Miller, Environmental Steward
- Processing Facility/Columbus Investment
 - Andy Rumpke, Steve Sargent, Rumpke
- Answer Questions

Two Years of Study/Analysis



Internal

- Councilmember Craig, former Chairman Public Service & Transportation Committee
- Mark Kelsey, Director of Public Service
- Erin Miller, Environmental Steward
- Leslie Strader, Assistant Environmental Steward
- Pam O'Grady, Director of Government Affairs
- Steve Lennon, Refuse Division Administrator
- Rick Tilton, Assistant Director of Public Service
- Dave Bush, Assistant Finance Director
- Ted Rundio, Assistant Director of Public Service

External

- Jeff Cahill, Rick Dodge, Albert Iosue, John Remy, Kristi Higginbotham of SWACO
- Joe Bonnell, The Ohio State University
- Angel Arroyo-Rodriguez, OEPA
- David Brehm , Brehm Consulting
- Dan Weisenbach, Weisenbach Recycled Products
- Elan Daniel, Columbus Community Coalition and Urban Nature
- Gloria Zebbs Anderson, North Central Area Commission

Program Design – A Best Practice



- Collection – Rumpke: 227,000 homes
- Alternating, every other week recycling and yard waste
 - Recycling pick-up at alley or at curb, consistent with location of refuse collection
 - No direct fee to residents
 - Adds to program efficiency
 - Limits truck trips through neighborhoods and related emissions
- Trash collection remains unchanged



Program Design – A Best Practice



- 64 gallon blue carts for recyclables
 - Wheels and lid
 - No charge for cart - a second or replacement can be purchased
 - Yard waste: No Changes
- Acceptable materials
 - Paper, plastic bottles, glass containers, steel and aluminum cans, milk cartons and juice boxes
 - All recyclables in one cart
- Drop boxes – 200+
 - Relocated for increased convenience

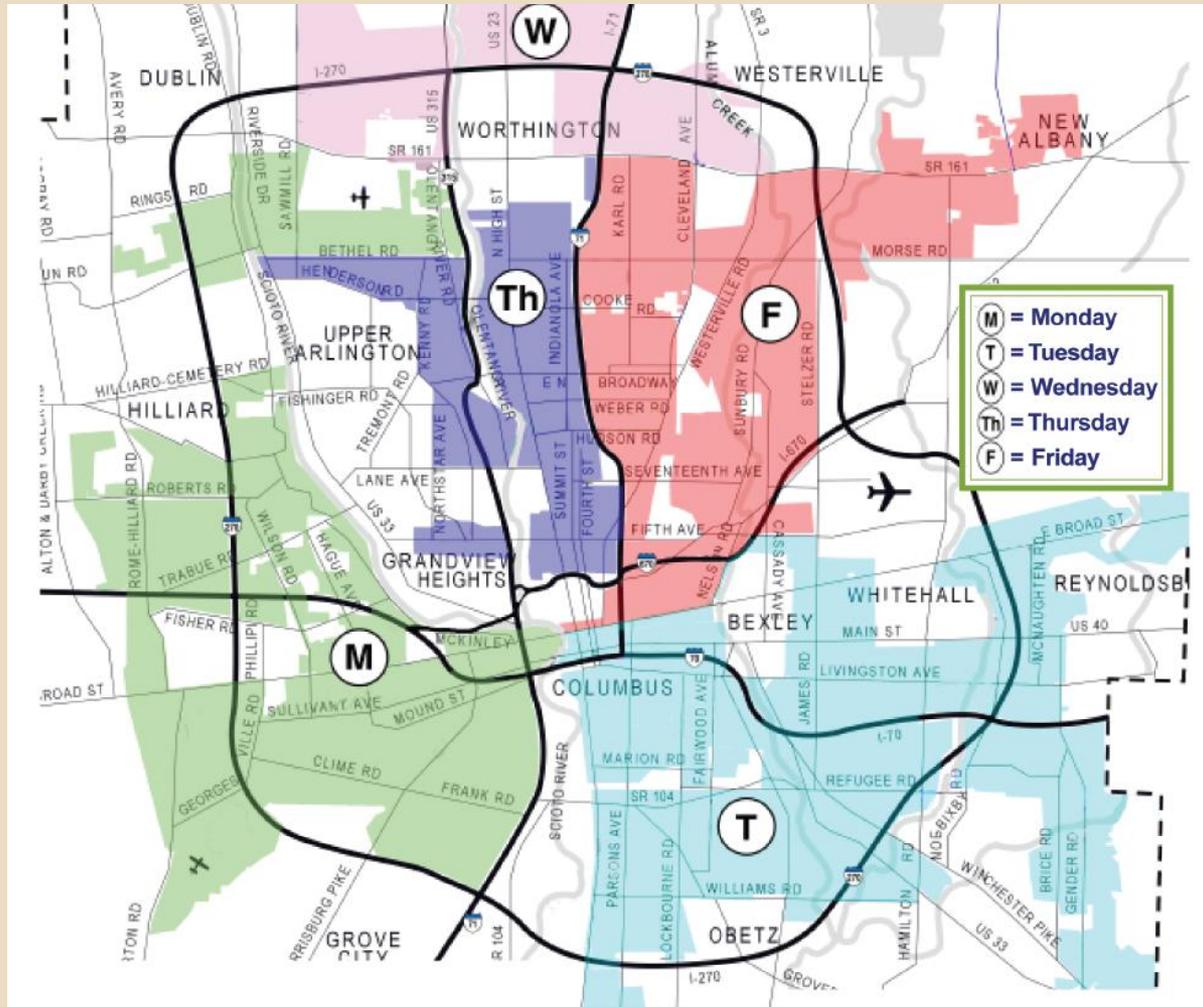


Program Begins Spring 2012



- Containers will be dropped off 4-6 weeks prior to service
- 12 months with 5 phases
 - Phase One: Monday – June 57,000 homes
 - Phase Two: Tuesday – August 65,000 homes
 - Phase Three: Wed – October 21,000 homes
 - Phase Four: Thurs – December 36,000 homes
 - Phase Five: Fri – February 2013 48,000 homes
- Yard waste and subscription recycling services continue until new services begin

Implementation Schedule



2010 Landfill Diversion from Recyclables – 8%



- Drop boxes (6%)
- Subscription recycling (2%)

2015 Goal Recycling Diversion – 22%-25%



- Recycling increases from 8% to 22%-25%
- Diverts 55,000-62,000 tons/year from landfill
- Saves \$3 million+ in tipping fees yearly
- 485-546 lbs. per cart, per home by 2015
- Consistent with other cities experience using cart
- Consistent with Rumpke's estimates



City Benchmarking



Cities Using Carts

- Cincinnati – 396 lbs.
- Dublin – 840 lbs.
- Toledo – 421 lbs.
- Phoenix – 567 lbs.
- Columbus subscription service - 735 lbs.
- Akron – participation increased 16%-60% with carts

National Average/Carts – 450/500 lbs.

Citywide Public Education Campaign

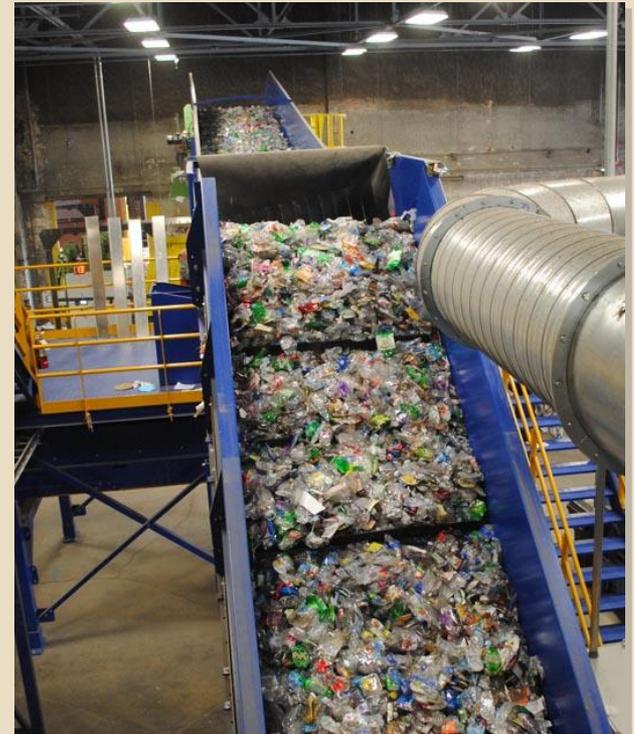


- **MurphyEpson & Curbside Value Partnership**
 - Leverages \$125,000 in pro bono work
- **Recruiting sponsors/grants to promote program**
 - \$100,000 ODNR grant towards the program
- **Boost diversion rates and decrease contamination**
- **Residents need to know**
 - What goes in cart
 - What goes in trash
 - When and where cart is collected
 - Why they should recycle

Affordable and Cost-effective Program



- Competitive bid process for collection/carts
- Saves \$13-\$15 million in tipping fees – first five years
- Makes popular yard waste collection more efficient
- Uses same truck to collect yard waste and recyclables



Estimate for Recycling Tonnage & Diversion from Single Family Residential Households



Year	Tons	Diversion	SFR Recycling Program Expenditures		Landfill Fees Avoided 2012 to 2016= \$55.42/ton	Net Program Total
			Rumpke	Other*		
2012	28,000 - 35,000	11-14%	\$2.6 MM	\$1.2 MM	\$1.5 – \$1.9 MM	\$2.3 – \$1.9 MM

*Other includes carts, cart maintenance and education.

Note: Estimates for tons were calculated by benchmarking other cities and consulting with Rumpke. Tonnage and diversion estimates for recycling do not include yard waste. Yard waste diversion for 2010 was 9%, which varies slightly (+-1% each year).

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2014	52,000 - 59,000	21-23%	\$2.8 MM	\$1.3 MM	\$2.8 – \$3.2 MM	\$1.3 – \$.95 MM

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2016	58,000 - 65,000	23-26%	\$2.9 MM	\$1.4 MM	\$3.2 – \$3.6 MM	\$1.1 – \$.7 MM

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Five Year Estimate for Residential Recycling



Year	Tons	Diversion	SFR Recycling Program Expenditures		Landfill Fees Avoided 2012 to 2016= \$55.42/ton	Net Program Total
			Rumpke	Other*		
2012 - 2016 Total			\$14 MM	\$6.8 MM	\$13.4 – \$15.3 MM	\$7.3 – \$5.4 MM

*Other includes carts, cart maintenance and education.

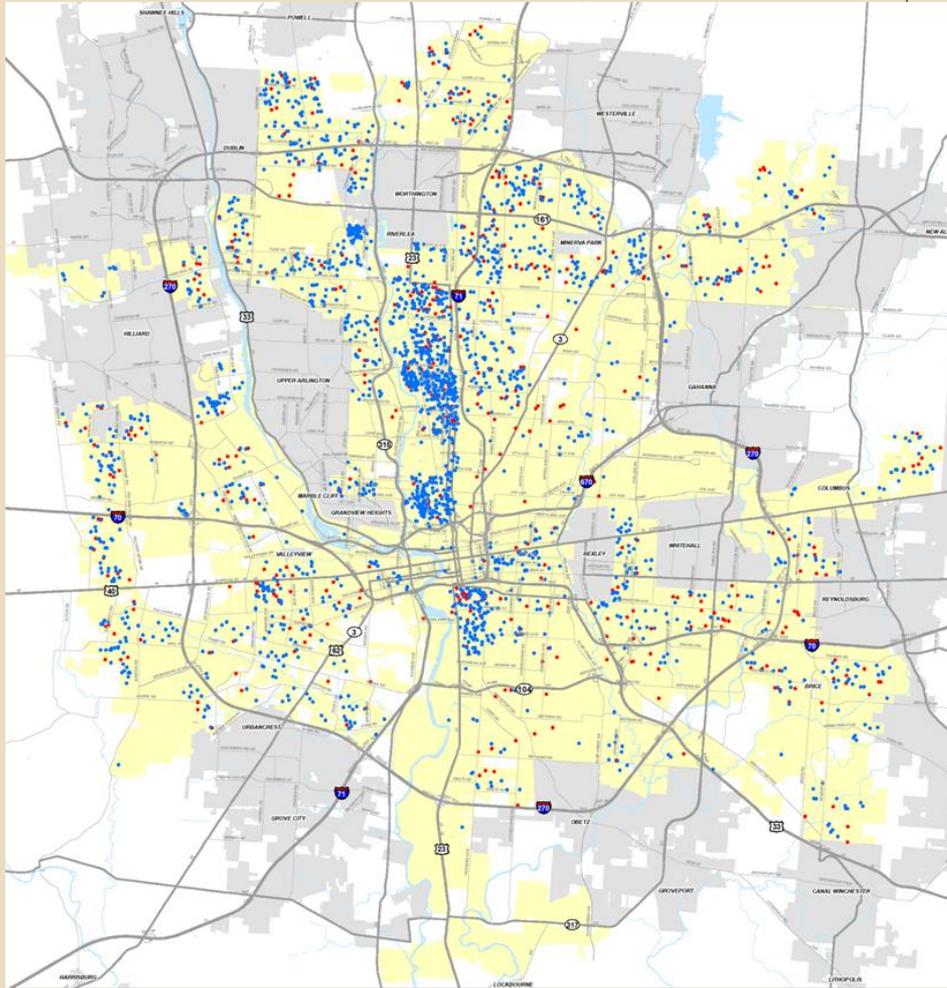
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Residential Recycling Benefits



- Preserves environment
 - Cleaner water and sewer
 - Saves natural resources
 - Gives landfill more life
- Residents want basic service
- Creates and retains jobs
- Saves tipping fees
- Positioning region for more efficient program

Citywide Survey Shows Popularity of Residential Recycling



- Paper Survey
 - 501 surveys returned (50% response rate)
- Online Survey
 - 4,250+ responses
- Responses from all over city

Legend

- Online Surveys
- Paper Surveys
- Water
- Columbus Corporate Boundary

Survey Results



- Recycling pick-up preference

- Every week: 37%
- Every two weeks/
monthly – 63%

- Yard waste pick-up preference

- Every week: 20%
- Every two weeks/
monthly: 53%



- Cart preference

- 73% want cart

A New Era of Waste Management



- Public Service has spent considerable time understanding issue – studying best practices
- Excellent partner in Rumpke
- Welcome Andy Rumpke and Steve Sargent



Andrew Rumpke



**VICE PRESIDENT
RUMPKE**



Rumpke in Columbus



- Family owned & operated since 1932
 - 75 family members active today
- Early 1990s – opened location in Columbus on Fields Ave.



Employment in Columbus



- 260 employees in Columbus
 - Majority are full-time with comprehensive health and insurance benefits
 - Minority representation: 30%+
 - Since 2009: added 23% more jobs
- New city recycling program – 60 total jobs
 - 30 new jobs
 - 30 retained jobs

Investment in Columbus



- Upgrades & renovations
 - \$15M since 2009
 - Structural enhancements
 - New recycling facility & equipment
 - No financial risk to taxpayers (e.g. City, County, SWACO)
- Tours available to the public
 - See for yourself

Steve Sargent



**DIRECTOR OF RECYCLING
RUMPKE**



City of Columbus Comprehensive Yard Waste & Residential Recycling Proposal



- Economic aspects of Rumpke's proposal
 - Is infrastructure in place to support this program?
 - Are there “defined cost trends” to evaluate?

Is residential recycling a cost-effective
alternative to solid waste disposal?

Rumpke Proposal



- Residential recycling
- \$1.02 per household per month for 227,000
- One of the most cost-effective programs in Ohio and the U.S.

How can Rumpke provide this service for \$1.02 per HH?

Rumpke Proposal



Landfill Disposal vs. Recycling Processing

- Delivered to landfill at \$55.42/ton
- Delivered to recycling facility at \$0/ton
 - Plus Applied value of recyclables

Rumpke Proposal



Reduced Collection Costs

- Alternating to every-other-week collection
- Adding residential recycling service
- Utilizing the same collection vehicle to maximize the collection potential of each truck (both services: yard waste & recycling)

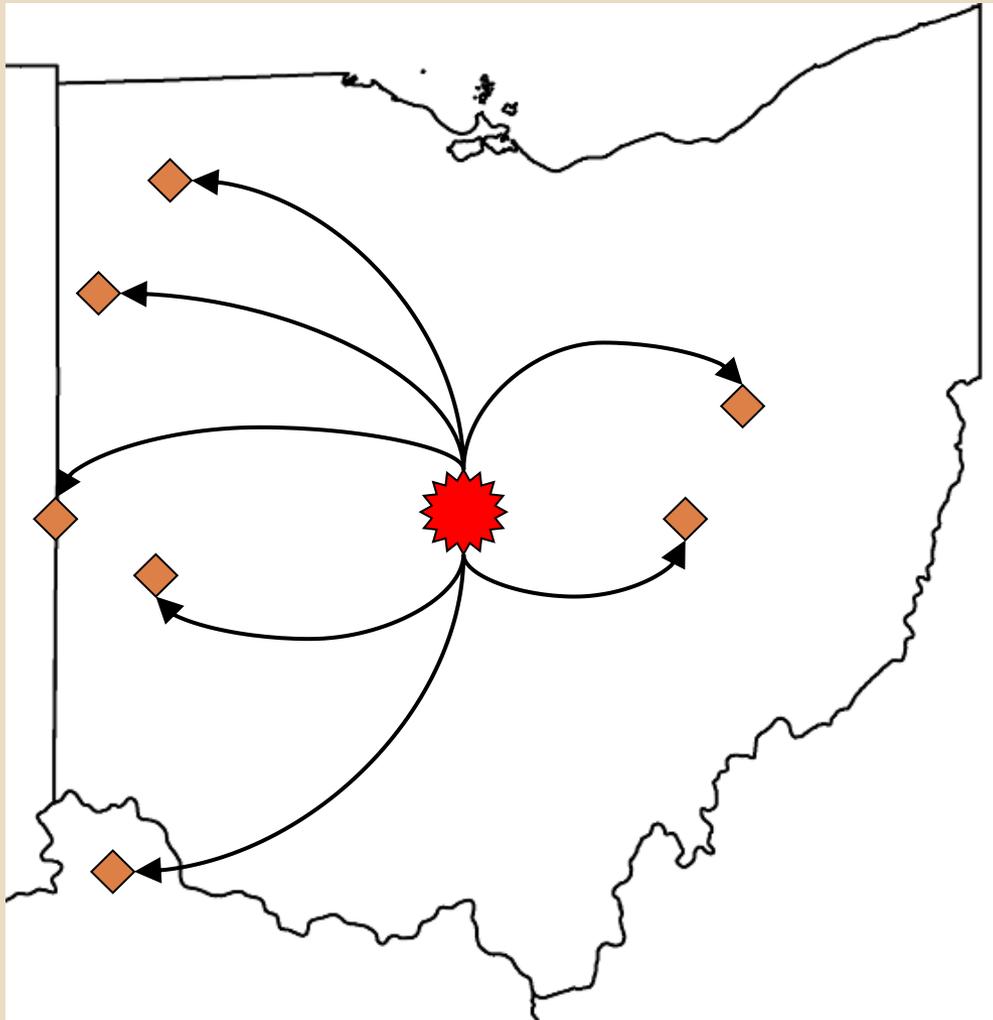
Alternatives to Residential Recycling



Is there a proven, more cost-effective method of reducing the residential waste stream other than the proposed program?



What Happens to Recyclables?



Regional Benefits

- 80% marketed within 150 miles
 - IH Schlezinger (steel)
 - Rock-Tenn Paper (fiber)
- Job creation at all levels
- Economic development
- Resources waiting to be recovered from the waste stream

Rumpke's Commitment



\$15M private investment



Assume commodity market risk



Active role to increase tons

A New Era of Waste Management



Thank You

Recycling:

It preserves our environment.

Our citizens want it.

It is affordable and cost effective.